

NUTRITION SERVICES DIVISION MANAGEMENT BULLETIN

No.: 00-404

TO:	All Food Distribution Agencies	ISSUE DATE: March 2000
FROM:	Commodity Distribution Unit, Food Distribution Program	
ATTENTION:	Food Service Directors	
SUBJECT:	Proper Storage Temperatures for United States Department of Agriculture (USDA) Commodities	

This management bulletin transmits information regarding the importance of proper storage temperatures for USDA commodities.

Correct temperature control is essential to maintain food quality, nutrient content, and control of bacterial growth. Daily monitoring of temperatures is necessary to ensure adequate storage conditions. An example of a storage temperature log is attached for your information.

Dry Storage

Many items such as canned goods, baking supplies, grains, and cereals may be held safely in dry storage areas. The guidelines below should be followed:

- Keep dry storage areas clean with good ventilation to control humidity and prevent the growth of mold and bacteria.
- Store dry foods at 50°F for maximum shelf life. However, 70°F is adequate for dry storage of most products.
- Place a thermometer on the wall in the dry storage area.
- Check the temperature of the storeroom daily.
- Store foods away from sources of heat and light, which decrease shelf life.
- Store foods off the floor and away from walls to allow for adequate air circulation.

Refrigerated Storage

Refrigeration increases shelf life of most products. Most importantly, refrigeration slows bacterial growth. Optimal refrigerated storage conditions can be achieved by following these guidelines:

- Maintain refrigerated storage spaces at 32-40°F.
- Make thermometers readily observable, easily readable, and accurate to +3°F.
- Position the temperature sensor to register the warmest air in the refrigerated space to ensure adequate cooling.
- Establish the correct refrigerator temperature by placing a thermometer in a glass of water in the middle of the refrigerator. Wait 5 to 8 hours. If the temperature is not 38-40°F, adjust the temperature control. Check again after 5-8 hours.
- Ensure that refrigerators have enough open, slotted shelving to allow for air circulation around shelves and refrigerator walls to maintain proper food temperatures.
- Ensure that doors have a good seal and close tightly to maintain the temperature and the

efficiency of the unit. Additionally, keep doors closed as much as possible.

- Keep a back-up appliance thermometer in the unit in case of a power outage. If the refrigerator is still 40°F when the power returns, the food is safe. The food should not be consumed if the temperature is held at 40°F for more than two hours.

Freezer Storage

Freezers should be used to store frozen food when it is received. Optimal frozen storage conditions can be achieved by following these guidelines:

- Maintain freezer storage spaces at 0°F or below.
- Make thermometers readily observable, easily readable, and accurate to +3°F.
- Position the temperature sensor to represent the actual storage temperature or place several thermometers in the unit to ensure accuracy and consistency.
- Establish the correct temperature in the freezer by placing a thermometer between frozen food packages. Wait 5 to 8 hours. If the temperature is not 0-2°F, adjust the freezer temperature control. Check again after 5-8 hours.
- Ensure that freezers have enough open, slotted shelving to allow for air circulation around shelves and walls to maintain adequate food temperatures.
- Ensure that doors have a good seal and close tightly to prevent heat gain. Additionally, keep doors closed as much as possible.
- Keep a back-up appliance thermometer in the unit in case of a power outage. If the freezer is still 0°F when the power returns, the food is safe.

If your commodities are not stored at the proper temperature, or you have any questions regarding this management bulletin, please contact: Amy Bell, R.D., Child Nutrition Consultant for Southern California, at (916) 322-5051, (800) 952-5609, or abell@cde.ca.gov; Carol Guenther-Wilson, Child Nutrition Consultant for Northern California, at (916) 324-9875, (800) 952-5609, or cguenthe@cde.ca.gov.

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References:

Serving it Safe: A Manager's Tool. United States Department of Agriculture, 1996.

<http://www.fsis.usda.gov/oa/pubs/aptherm.htm>

<http://www.foodsafety.org> <http://www.nshpts.med.navy.mil/corres/food/manual/section5.htm>

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